IN THE UNITED STATED PATENT AND TRADEMARK OFFICE

In re the Application of: **Michael Chad Hollis et al.**

Serial No.: **10/717,536** Art Unit: **3724**

Filed: **November 21, 2003** Examiner: **Stephen CHOI**

For: **BEVEL ANGLE LOCKING ACTUATOR AND BEVEL ANGLE LOCKING SYSTEM FOR A SAW**

REPLY BRIEF

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U.S. Patent and Trademark Office
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Sir:

Appellant respectfully submits this Reply Brief under 37 C.F.R. § 41.41 in response to Examiner's Answer ("the Answer"), dated February 14, 2008, which maintained the rejections of claims 1-5, 29-31, and 52-54.

I. Status Of Claims

Claims 1-5, 29-31, and 52-54 are pending and rejected. Claims 6-28 and 32-51 have been canceled. Claims 1-5, 29-31, and 52-54 are appealed.

II. Grounds of Rejection to be Reviewed on Appeal

1. The rejection under 35 U.S.C § 102(b) of claims 1-5, 29-31, and 52-54 as being anticipated by U.S. Patent 6,021,700 to Garuglieri ("Garuglieri").

2. The rejection under 35 U.S.C § 103(a) of claim 30 as being unpatentable over Garuglieri in view of Applicant's Admitted Prior Art ("AAPA").

III. Arguments

1. The Rejection Under 35 U.S.C § 102(b) of Claims 1-5, 29-31, and 52-54 As Being Anticipated By Garuglieri Is Not Proper

A. Garuglieri Does Not Anticipate Claims 1 and 52 Because The Bevel Angle Locking Actuator Is Mounted To the Support Saw Assembly, Not Indirectly Mounted Thereto.

Garuglieri does not anticipate claims 1 and 52 because the broadest reasonable interpretation of "mounted to" requires the bevel angle locking actuator 290 to be mounted to saw support assembly 200, and not indirectly mounted thereto. During examination, pending claims must be given their broadest reasonable interpretation consistent with the specification, as it would be understood by one of ordinary skill in the art. See Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005); see also Ex Parte Baudendistel *et al.*, 2005 WL 191049, Appeal No. 2004-1553 (Bd. Pat. App. & Interf. 2005) (finding that the broadest reasonable interpretation of the

claim terminology "connected to," when read in light of the specification, did not include "to associate or relate"). Claim 1 recites in pertinent part "a bevel actuator mounted to the saw support assembly." Throughout the specification, the structural relationship of the bevel angle locking actuator 290 with respect to the saw support assembly 200 is described as a direct mount: "[p]ositioning the bevel angle actuator 290 **on** the saw support assembly 200 provides several advantages," and "[t]he bevel angle actuator is more easily accessible to the user when **mounted to** the saw support assembly 200." See [0028] (emphasis added). Nowhere in the specification is the bevel level actuator 290 described as being indirectly mounted to or associated with the saw support assembly 200.

Moreover, the bevel angle locking member 290 is shown as mounted on the saw support assembly 200 in each exemplary embodiment disclosed in the specification. Figures 1 and 2 are reproduced below for illustrative purposes:

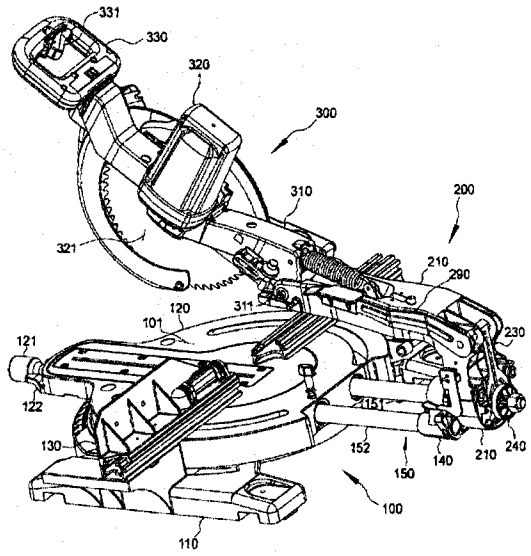

FIG. 1

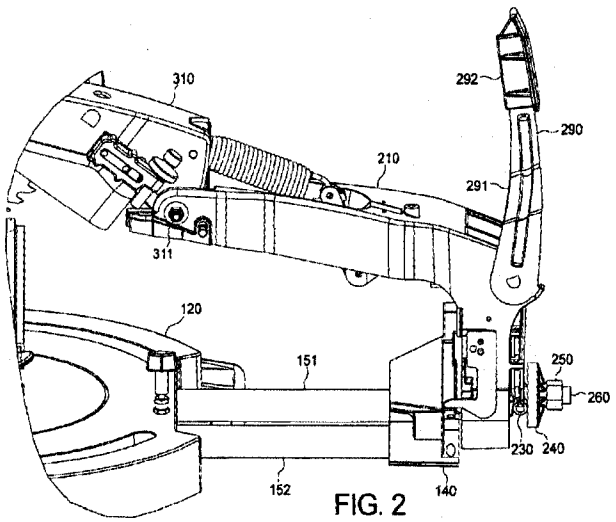

FIG. 2

As shown in Figures 1 and 2, the bevel angle locking actuator 290 is mounted to the saw support assembly 200 without any intermediary, connecting, or anchoring pieces or components. Figure 2 is explained in the specification as showing the bevel angle locking actuator 290 comprising an

elongated lever 291 and a handle 292, and the elongated lever 291 may be stamped from sheet metal so that it can be mounted on the saw support assembly 200. See [0028].

Unlike the present application, Garuglieri discloses a handle 172[1] that is attached to a tightening arrangement 67 and link pin 66: "A link pin 66 joins the guide support 62 to the pivot support 26[2] and passes through a slot 68 in the pivot block rearmost portion 50. The link pin 66 causes the pivot support 26 and the guide support 62 to move in unison and is provided with a nut or other tightening arrangement 67 (and handle 172). . . ." See Garuglieri, Col. 20, ll. 17-25. Thus, Garuglieri expressly describes the handle 172 as being **attached to the link pin 66**, which is separate from the pivot support 26. At best, Garuglieri discloses a handle 172 that is **associated with**, not "mounted to," the pivot support 26 through an intervening tightening arrangement 67.

In the Answer, the Examiner defines "mounted" to mean "to attach to a support."[3] See Answer, p. 5. The Examiner then broadens the definition of "mounted" beyond a reasonable scope, and without any support, to include **an indirect connection** and concludes that the handle 172 is **indirectly mounted to** the pivot support 26 through the link pin 66 and guide support 62. Id. (emphasis added). Broadening the definition of "mounted" in this way is inconsistent with the present application, as shown above. Moreover, to define "mounted" to include indirect connections broadens the claim terminology beyond the broadest reasonable interpretation because it is not clear how many intermediary components would be permissible between the bevel angle locking actuator 290 and the saw support assembly 200. Such an interpretation may render the claim indefinite. Therefore, Garuglieri does not anticipate claims 1 and 52 because the Examiner has interpreted "mounted to" in a way that is inconsistent with the present

[1] The handle 172 is alleged to be equivalent to the bevel angle locking actuator 290.
[2] The pivot support 26 is alleged to be equivalent to to the saw support assembly 200.
[3] Merriam-Webster Onlince Dictionary (definition v. 6a.). See Answer, p. 5.

specification and beyond the broadest reasonable interpretation of the term. For at least these reasons, independent claims 1 and 52, as well as dependent claims 2-5, 29-31 and 53 are patentable over Garuglieri.

B. Garuglieri Does Not Anticipate Claim 54 Because The Bevel Locking Linkage "Translates In a Direction Normal to the First Rotational Axis" Without Rotation.

Garuglieri does not anticipate claim 54 because the broadest reasonable interpretation of "translates" requires the bevel locking linkage 230 to move without rotation. During examination, pending claims must be given their broadest reasonable interpretation consistent with the specification, as it would be understood by one of ordinary skill in the art. See Phillips, 415 F.3d 1303. Claim 54 recites in pertinent part "a bevel locking linkage which translates in a direction normal to the first rotational axis . . . ." Throughout the specification, the bevel locking linkage is described as moving "almost in straight line motion in a direction approximately normal to the longitudinal axis of bolt 260." See [0033]. This description is consistent with the dictionary definition of "translate": to change the position of (a body or figure) in space **without rotation**. Webster's Third New Int'l Dictionary 2429 (1993) (emphasis added).

Garuglieri fails to disclose such a translating linkage. In contrast, Garuglieri discloses a bevel locking linkage that *rotates* about an axis normal to the bevel angle axis, as shown in the Answer. See U.S. Pat. No. 6,021,700, Col. 4, ll. 13-25, Figures 2a and 2b; U.S. Pat. No. 5, 590,991, Col. 2, ll. 42-50, Figure 1. Thus, Garuglieri fails to disclose a "saw support assembly rotating relative to the base assembly about a first rotational axis ... a bevel locking linkage which ***translates*** in a direction normal to the first rotational axis," as recited by claim 54 of the present application. For at least these reasons, independent claim 54 is patentable over Garuglieri.

2. **The Rejection Under 35 U.S.C § 103(a) of Claim 30 As Being Unpatentable Over Garuglieri In View of AAPA Is Not Proper**

The rejection of claim 30 under 35 U.S.C § 103(a) as being unpatentable over Garuglieri in view of Applicant's Admitted Prior Art ("AAPA") is not proper. Since claim 30 is dependent on independent claim 1, and since the AAPA does not cure the deficiencies of Garuglieri with respect to claim 1 as recited above, dependent claim 30 is patentable over Garuglieri in view of AAPA.

IV. Conclusion

For at least the reasons given above, the rejections of claims 1-5, 29-31, and 52-54 are improper. Appellants respectfully requests the final rejection by the Examiner be reversed and claims 1-5, 29-31, and 52-54 be allowed.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-0206, and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: April 14 2008

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V. Claims Appendix

1. A saw comprising:

   a base assembly with a top surface;

   a fence assembly mounted to the base assembly with a front surface positioned above the top surface of the base assembly, the front surface of the fence assembly and the top surface of the base assembly cooperating to support a workpiece thereon;

   a saw support assembly rotatably mounted to the base assembly to rotate relative to the base assembly about a first rotational axis;

   a saw unit having a saw blade capable of turning to cut a workpiece, the saw blade defining a cutting plane that is approximately parallel to the first rotational axis, the saw unit supported by the saw support assembly above the top surface so that the saw blade is capable of being moved relative to the base assembly by a user into a workpiece resting on the top surface of the base assembly to make a cut, the saw unit and the saw support assembly rotating together about the first rotational axis to adjust the bevel angle of the saw blade; and

   a bevel angle locking actuator mounted to the saw support assembly, wherein the bevel angle locking actuator rotates in unison with the saw support assembly about the first rotational axis when the bevel angle of the saw blade is adjusted, and wherein the bevel angle is capable of being adjusted by a user when the bevel angle locking actuator is in an unlocked position and the bevel angle cannot be adjusted by a user when the bevel angle locking actuator is in a locked position.

2. The saw of claim 1 wherein:

   pivoting the bevel angle locking actuator to its locked position causes a surface of the saw support assembly to be moved against a surface of the base assembly to increase the pressure between the surfaces, the increased pressure resulting in increased friction which resists rotation of the saw support assembly relative to the base assembly.

3. The saw of claim 1 wherein:

   the bevel angle locking actuator is pivotally mounted to the saw support assembly to pivot about an axis approximately normal to the first rotational axis, the bevel angle locking actuator pivoting relative to the saw support assembly between its locked position and unlocked position.

4. The saw of claim 1 wherein:

   the bevel angle locking actuator is pivotally mounted to the saw support assembly and pivots about a pivoting axis relative to the saw support assembly between its locked position and unlocked position.

5. The saw of claim 4 further comprising:

   an eccentric surface eccentrically formed from the pivoting axis of the bevel angle locking actuator, the eccentric surface being operatively connected to the bevel angle locking actuator; and

a linkage;

wherein pivoting of the bevel angle locking actuator to the locked position causes the eccentric surface to pivot, the pivoting of the eccentric surface driving a movement of the linkage, the movement of the linkage pushing a surface of the saw support assembly against a surface of the base assembly to lock the bevel angle.

6-28. (Canceled).

29. The saw of claim 1 wherein the bevel angle locking actuator comprises an elongated lever.

30. The saw of claim 29 wherein the elongated lever is formed from stamped sheet metal.

31. The saw of claim 29 wherein the saw support assembly comprises a lower arm, and when the bevel angle locking actuator is in the locked position, the elongated lever extends generally parallel to the lower arm.

32-51. (Canceled).

52. A saw comprising:

a base assembly;

a saw unit having a saw blade turning about a second rotational axis to cut a workpiece;

a saw support assembly rotatably mounted to the base assembly, the saw support assembly rotating relative to the base assembly about a first rotational axis to adjust the bevel angle of the saw blade, and the saw support assembly supporting the saw unit and pivoting the saw unit to plunge the saw blade into a workpiece resting on the base assembly;

a bevel locking lever pivotally mounted to the saw support assembly, the bevel locking lever pivoting relative to the saw support assembly about a third rotational axis not parallel with the first rotational axis.

53. The saw of claim 52 wherein the third rotational axis is approximately perpendicular to the first rotational axis.

54. A saw comprising:

a base assembly;

a saw unit having a saw blade;

a saw support assembly rotatably mounted to the base assembly, the saw support assembly supporting the saw unit and pivoting the saw unit to plunge the saw blade into a workpiece resting on the base assembly, the saw support assembly rotating relative to the base assembly about a first rotational axis to adjust the bevel angle of the saw blade;

a bevel locking linkage which translates in a direction normal to the first rotational axis, the translation of the bevel locking linkage causing the saw support assembly to be pushed against the base assembly creating friction which prevents relative rotation.